NF MICROCRYSTALLINE

Koster Keunen NF Microcrystalline Waxes follow the US Pharmacopeia requirements. They are characterized by their fine crystalline structure in contrast to the larger crystalline structure of paraffin wax. They contain long, branched hydrocarbon chains which correlate to a higher molecular weight. Microcrystalline is more flexible, less oily, has higher tensile strength, more adhesion, and higher melt points than paraffin wax. These waxes have excellent gelling properties, and we carry an assortment of different specifications to best fit formulators’ requirements.

### CHEMICAL PROPERTIES

<table>
<thead>
<tr>
<th>PRODUCT NAME</th>
<th>PRODUCT CODE#</th>
<th>MELTING POINT</th>
<th>CONSISTENCY</th>
<th>PENETRATION</th>
<th>CONGEAL POINT</th>
</tr>
</thead>
<tbody>
<tr>
<td>Microcrystalline 193/198 NF</td>
<td>118</td>
<td>82.2-92.2°C</td>
<td>3-100 dmm</td>
<td>5-9 dmm</td>
<td>179-197°F</td>
</tr>
<tr>
<td>Microcrystalline 170/180 NF</td>
<td>140</td>
<td>170-180°F</td>
<td>3-100 dmm</td>
<td>25-35 dmm</td>
<td>N/A</td>
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<tr>
<td>Microcrystalline 150 NF</td>
<td>841</td>
<td>150-160°F</td>
<td>3-100 dmm</td>
<td>20-35 dmm</td>
<td>148-162°F</td>
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<tr>
<td>Microcrystalline 145/155 NF</td>
<td>461</td>
<td>N/A</td>
<td>3-100 dmm</td>
<td>20-30 dmm</td>
<td>143-154°F</td>
</tr>
</tbody>
</table>

NF Microcrystalline Meets the Requirements of the following USP/NF Tests: Color, Residue on Ignition, Organic Acids; Fixed Oils, Fats and Rosin; Acidity and Alkalinity.

### FORMULATION GUIDELINES

Microcrystalline waxes are non-toxic, non-irritating and compatible with various chemistries from natural, mineral, and synthetic raw materials. NF grade microcrystalline wax is used in personal care, pharmaceutical, nutritional and food applications.

### REGULATORY

- NOT TESTED ON ANIMALS
- KOSHER
- ORGANIC
- GMO FREE
- NPA
- GRAS

- CANADA: Listed
- JAPAN: Listed/Unknown at time of print*
- CHINA: Listed
- AUSTRALIA: Listed
- REACH: Registered

* Microcrystalline 145/155